



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/561,602

03/06/2007

Tadahiro Ohmi

SUGI0160

6448

24203 7590 06/05/2009

GRIFFIN & SZIPL, PC  
SUITE PH-1  
2300 NINTH STREET, SOUTH  
ARLINGTON, VA 22204

EXAMINER

RAEVIS, ROBERT R

ART UNIT

PAPER NUMBER

2856

MAIL DATE

DELIVERY MODE

06/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/561,602	<b>Applicant(s)</b> OHMI ET AL.	
	<b>Examiner</b> Robert R. Raevis	<b>Art Unit</b> 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6,9 and 11-16 is/are allowed.
- 6) ☒ Claim(s) 7,8,10 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/20/06</u> . | 6) <input type="checkbox"/> Other: ____.  |

### **DETAILED ACTION**

Claims 7,8,10,17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, what is that odd punctuation mark located immediately after the "and" (line 4) and "sensor" (line 6)?

As to claim 3, what is that odd punctuation mark located immediately after the "and" (line 5) and "sensor" (line 6)?

As to claim 10, "the control valve" (lines 2 and 3 from last) and "the flow rate" (last line) lack antecedent basis.

As to claim 4, what is the single "--" (on line 7) immediately before "is inputted" (line 7)? Should it be deleted?

As to claim 5, what is the single "--" (line 5 from last)) after the "pressure sensor" (line 5 from last)? Should it be deleted?

As to claim 7, which of the two previously introduced pressure sensors does "the pressure sensor" (line 7, and many other locations) refer back to? (the "upstream", "downstream", either the upstream or downstream, at least one of the upstream and downstream....?)

As to claim 8, which of the two previously introduced pressure sensors does "the pressure sensor" (line 2) refer back to? (the "upstream", "downstream", either the upstream or downstream, at least one of the upstream and downstream....?)

As to claim 17, should the "or" (line 1) be deleted? If not, what might the alternative be?

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Williams teaches (col. 2, lines 52-55) that time-varying zero point drift is a function of a variety of factors (i.e. operating conditions), and illustrates (Figure 6) how to compute the offset “b”. However, Williams does not teach cancelling time-varying zero point drift of the pressure sensor “when...operating conditions” (last 4 lines of claims 1,3,5,7).

Danninger teaches (col. 12, lines 47-65) a time-varying zero point drift correction means that employs comparing the time derivative of the pressure signal (which derivative is not the sensor output, but a derivative thereof) with a threshold in determining compensation. However, the threshold is not compared with the sensor output.

Surjadi et al teach (ABSTRACT) automatically calibrating for zero offset when it is determined that operating conditions of the pressure sensor are such that the turbine is not operating and no pressure activity is sensed by the transducer (i.e. set operating conditions). However, it does not determine if the pressure sensor output voltage is larger than a set value as called for in claims 1,3,5,7).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Mon to Fri from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Robert R. Raemis/

Primary Examiner, Art Unit 2856